

# TX-37A TRANSMITTER

## ASSISTIVE LISTENING SYSTEMS



### PRODUCT OVERVIEW

The TX-37A Transmitter is the core of Gentner Assistive Listening Systems. The transmitter utilizes leveling multi-band compression and peak limiting together with the patented Aphex Aural Exciter® to process audio for maximum intelligibility and loudness. While other assistive listening transmitters simply increase volume, Gentner's TX-37A actually enhances the sound quality to increase audio clarity at louder levels. It also eliminates the potential for clipping and overmodulation.

The transmitter can be set to 37 different frequencies allowing you to use multiple transmitters in one location while reducing the possibility for audio interference. This is especially useful for education and simultaneous translation applications. Its universal input stage accepts audio from mic, line, or speaker levels producing exceptional audio quality at all levels. Connection is made to the existing audio system via a tape or mixer auxiliary output.

The transmitter is designed with a compact, steel, 1/2 rack unit chassis. The shielded steel chassis protects the unit from damage and keeps out hum as well as other system noise. Gentner provides a rack mount kit\* (sold separately) to store the transmitter in a standard 1/2 RU rack space.

### APPLICATIONS

- Theatrical productions, such as the opera, ballet, symphony, and plays
- Concerts in auditoriums or stadiums
- Lectures in convention centers
- Outdoor, sporting events
- Church services

### FEATURES/BENEFITS

- Only transmitter to combine multiband compression, automatic gain control and peak limiting so there is no clipping or overmodulation, superior overall sound quality and dynamics control
- Transmits to an area of more than 700,000 square feet, so the TX-37A is low cost for large venues
- Easily connects to any source—universal input stage provides input for mic, line, or speaker level, balanced or unbalanced
- Field selectable channels (37) with digital tuning for lower risk of interference
- Built-in test tone aid for quick and easy receiver tuning
- Supplied with flex antenna, remote mount and 50' RG174 type cable
- Audio input level meter for visible indication of audio input and levels
- Adjustable RF level, allows control of RF coverage
- Rugged steel chassis for enhanced RF quality
- Audio monitor jack with volume control
- Aphex® processing for increased intelligibility
- Wide area FM system, works outdoors, in bright light, no line of sight restrictions



1 . 8 0 0 . 9 4 5 . 7 7 3 0  
1 . 8 0 1 . 9 7 5 . 7 2 0 0

\*single or dual rack mount kit

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# TX-37A TRANSMITTER

## ASSISTIVE LISTENING SYSTEMS



## SPECIFICATIONS

Physical Dimensions: 8.25"W x 1.75"H x 7.25"D 20.96 cm x 4.5 cm x 18.42 cm	Automatic Gain Control Range: 40dB	RF Level Adjust: 1/4, 1/2 and full power
Weight: 2.5 lb. / 1.13 kg. dry 5.4 lb. / 2.46 kg. shipping	Manual Input Level Control: 20dB	Frequency Control: Digitally synthesized, crystal controlled
Audio Inputs: Mic, 600 Ohm balanced, 10 mV Line, 600 Ohm balanced, 1 V Line, 10K unbalanced, 1 V Speaker, unbalanced	Signal to Noise Ratio: 60dB	Frequency Stability: 0.005%
	Transmission Type: FM modulation	Selectable Frequencies: 37 channels between 72-76MHz
	Maximum Deviation: +/- 25kHz, 50kHz total	Power Requirements: 9-15VDC at 500mA
	Maximum Radiated Power: 8000 uV/m at 30M	

## ARCHITECTURAL & ENGINEERING SPECS

The transmitter shall operate in the 72-76 MHz Auditory Assistance Band as approved by the FCC. The transmitted field strength shall not exceed 80 millivolts per meter at 3 meters. The operating frequency shall be digitally selectable by rear panel thumbwheel switches to any of 37 frequencies in the approved band. The transmitter shall be FCC and Industry Canada approved.

Maximum FM deviation shall not exceed a total of 50 kHz. Frequency stability shall be controlled by a phase-locked loop frequency synthesizer with crystal reference and shall be accurate within +/- 0.005% from 0-50°C. The transmitter shall have a 50 Ohm antenna connector for a local or remote antenna. The RF output level shall be adjustable

by a rear panel slide switch providing 1/4, 1/2, and full power.

The transmitter shall have XLR balanced and RCA unbalanced input jacks selectable to balanced mic, balanced and unbalanced line, and unbalanced speaker audio signals. There shall be a front panel control to adjust the audio input level with an LED audio level display. There shall be a switchable high-pass filter providing a 6 dB/octave rolloff at 180 Hz. There shall be an audio processing chain consisting of wide-band AGC, multi-band compression, Aphex Aural Exciter®, and peak limiting. There shall be a front panel control to regulate the overall amount of audio processing and a switchable 1 kHz test tone to aid setup and receiver tuning.

The transmitter shall be powered by an external AC line to 12 VDC power adapter. The front panel shall have a power switch with LED and an LED to indicate proper RF carrier operation. There shall be a 1/4" stereo monitor jack with volume control. The transmitter shall be rack mountable in a standard 1 RU rack steel package.

The Gentner TX-37A is specified



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